

# ABSTRACT

An asynchronous FIFO circuit has  
a memory;

asynchronous reading and writing means of reading a  
predetermined amount of data from and of reading the  
predetermined amount of data into the memory on a  
first-in-first-out basis;

an error write counter of counting counts up by 1 if the  
predetermined amount of data written into the memory contains  
an error;

an error read counter of counting up by 1 if the  
predetermined amount of data read from the memory contains  
an error;

comparing means of comparing a value of the error write  
counter with a value of the error read counter, the comparing  
means outputting a logic level of 0 when the value of the error  
write counter is coincident with the value of the error read  
counter, the comparing means outputting a logic level of 1  
if the former value is different from the latter value.